CRAGIST NEWSLETTER MARCH THRU JUNE 1990 #7

CRAGIST
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CRAGIST: Cedar Rapids And Greater Iowa Sinclair Timex. First meeting January 19th 1986.

Meetings have been sparsely attended, overtime and company trips have interferred.

I have had a number of inquiries both by phone and by letter about various T/S questions. All prompted by CRAGIST being listed in Computer Shopper in the User's Groups and now in Computer Buyer's Guide Users Group column.

I moved my computer gear back into my corner of the basement prior to Masako's (my wife) return May 9th from her visit to Japan. During the move a homemade disk drive power supply failed. Since an IBMer at the Collins Inventory Disposal Store had a drive supply checker I had him test some 63.5 watt power supplies and picked out two the cleaner ones for my satck of 4 full height 5 1/4 disk drives which tower 14 inches high. Counting up from the bottom they are drive 0 a 40 track, drive 1 an 80 track, drive 2 an 80 track and drive 3 a 40 track. Of course Tamdisk is drive 4. I also had a disk drive controller to disk drive cable problem and at present I only have two drives I can use at any one time. Thus at present I am using drives 2 and 3.

Like a kid that had never swam and has watched others dive off the high board I am forever getting into deep water. I am now trying to get into EPROM programming and have been accumulating parts to build a stand alone programmer/copier that an electronics magazine had an article on. Luckily there is a circuit board and the author did change the procedure to elimate a pair of special thumb wheel switches to use a hex key pad. And it uses a series of specially made personality sockets to be able to do different EPROMs. But last week I got part of an EPROM programmer and the part that is missing is the board with the sockets for the EPROMs and the manual. The company is still in existence but the bad news is that they are no longer making EPROM programmers. However, when I called an 800 number I was informed that maybe they could supply a schematic. Even in my limited knowledge of digital electronics that would be a help. The maybe did not yield either a schematic or a manual. When I get back to the project I can combine the two concepts if I do not get furthur information on the PRO-LOG unit. It was built by PRO-LOG CORPORATION and it is model # M900 PROM PROGRAMMER. It has both a serial and a parallel interface. A hex keypad plus some other switches and a bank of 7 segment led readouts. In the cavity where the missing board goes are three sockets, one is a 9 pin and the four pin line is connected to the transformer with the five pin line not used. The other two sockets are 25 pin and without a complete disassembly of the unit it is impossible to trace them. Any information at all would be welcome. I know where I can get a manual for a PRO-LOG M980 but it may not be applicable to this model.

I received a disk and new manual for MSCRIPT V5.5 from Jack Dohany this last week (April). He has produced some more changes/inprovements to MSCRIPT and I haven't "driven" it yet to see if I like it or not. It is supposed to be set up for my printer but I will see, I doubt if it will do all I would like to since there are a couple of things that the printer will not do like backspace for one. Jack must have used my filing system which was to put my request for the printer update with the data on the printer I sent in a pile and then letting it get

buried. It surfaced and he sent it out. And all this time I thought that he and Larry Kenny was busy on a project together and that was why the delay. Jack will be at:
JACK DOHANY
435 Woodward Way
Athens, GA 30606
(404) 543-5309 until mid-July and then he will be at his regular address of:
JACK DOHANY
390 Rutherford
Redwood City, CA 94061
(415) 367-7781

Jack is introducing a new wordprocessor that will work on the T/S 2068 with the Spectrum EPROM. However, according to the literature it is very particular about the type of printer EPSON and an EPROM which is a 32K one to replace both the T/S 2068 ROM and also provide the Spectrum ROM and that would be controlled by a switch on the back of the computer. The T/S 2068 replacement corrects the errors in the original ROM. If interested be best to get the exact information from Jack.

My work in documenting Mike LeDuc's kite/computer/camera project is progressing slowly. I have read a copy of Mike's article that is to appear in a future issue of an international Kite Flyer's magazine. Since it is in a kite magazine it is heavy on the kite flying information. A whole new world of terminalogy. As I present the information I will present it to show the prototype (what he built) and what he would build if he did it over again. The project is an outgrowth of a project when he was in college and that project controlled stage lights for a production. With most of the development already done it was easier to change to controlling a kite. Some of the changes were made since what was the state of the art back then has now produced bigger and faster memory chips. I will try to include as much variety of memory methods as I can to allow one to use whatever are available.

Issue 2 of the SNUG newsletter has arrived and it is full of thought provoking ideas. Without listing the ideas I guess that the best fedback would for every SNUG member to take each idea and make a list of pros and cons on each idea. You know what I mean- that is a wonderfull idea but? I firmly believe that is what is causing so much delay on getting going. Have you ever tried to do something for a group of people without alienating at least one? And to top if off most of the doers are still in the work force and I often wonder how they ever find time to do anything for SNUG.

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SMUG COMPUTERFEST 1990 THOUGHTS.

I had to go to the Fest in Waukesha by way of Decatur, IL since I had to drop my wife off to visit with our oldest daughter and her family. It may have been a shorter distance to drive from home direct to the FEST but I didn't have that option. However, the distance to the FEST from Decatur was about the the same as the distance from Cedar Rapids to Decatur so it wasn't bad. It was about 265 miles which isn't a bad drive. As usual I had the problems of getting off course since I am not map literate. I came into Waukesha by way of 18 from the west and downtown aparently the street made a drastic turn and I missed it. Had an interesting talk with a man that had been mowing his lawn and he had been in Camp McCoy and also Korea about the same time I was in both places. His directions got me within eyesight of the Hotel but I had to ask again the way out of the maze to the hotel and some men loading up their pickup and cars from a little construction job and were going that way had me follow and they pointed to the right place to turn. I had no problems leaving till I came upon I-74 on my return and since it was

under construction I had no signs to guide me and I ended up on I-74 EAST instead of 51 SOUTH. That was par for the course for me.

From the time that I arrived about 1:30 Friday till I left about 8:45 Monday morning it was T/S computers and it was like old home week visiting with all those I had met before and then getting acquainted with those I had not met before. I got a guestimate of the attendance of about 120 to 130. I think that a lot came for Saturday only.

The banquit was attended by 44 or there abouts and there was plenty of food. Of course everyone was expected to ignore the calories and the cholesterol, for my part I just said it was once a year or something like that and ate. Masako and I also had a high calorie and a high cholesterol meal on the way home from Decatur on Tuesday at a place just off of I-80, in IA, called the MACHINE SHED. The waitresses wore bib overals so you can imagine the atmosphere. More like old time farm meals in a restaurant with restaurant prices and worth it.

I helped (hindered) as they set up stuff after the banquit and when they closed the place at 11:00 PM I headed for bed. I stayed in the hotel all day Saturday except for a jaunt on foot to McDonald's to eat breakfast. Later in the day the already stiff winds picked up and rain came plus a storm and there were moans as the lights went out. Heard some lost programs that were on disks in drives when the computers went down.

I did not attend any of the seminars but there were several. In my case I don't think that I could sit still that long. Some were running late which caused a little confusion.

Zebra sent some stuff to be sold but the prices were not like at the CATS FEST but were higher and there were no reductions on the last hours of the last day. Still a lot got sold. A lot more of the hardware boards might have been sold if there was documentation. Some were mystery boards since no one knew what they were for. There was hardly any real competition since the only other really good competition was at the swap tables.

I was looking at disk drives (I was looking for a particular make) when someone that knew I dabbled in disk drives told me that another table had disk drives cheap. I went over and spotted a CAI module marked $5.00 and when I asked got a quote of $4.00 for each drive but he'd negotiate. I went down the stack and selected 2 drives all Tandon TM 100-2A and offered a ten spot for the works. He considered and accepted so I went over to the CATS table to find a place to set them down while I bargain hunted some more and after a moment a guy came over and said that the seller was perturbed since I didn't take all I bought. So I went back and got the other two drives that were there. At the same table the next day he had more drives and among them I found a Tandon TM 100-1A which is a single sided drive and got it for $2.00. So far I have tested the drives roughly and find I have one working single sided drive and two double sided drives that work. One of the original four was a single sided drive and it had a door missing. It did not work when I installed a door. Will require more than a quick test to get working.

I was originally trying to get a Siemens FDD 100-5 which is a single sided drive or else a double sided drive. I had already tried a Tandon TM 100-2A on the AERCO ZX81 disk controller but it did not even kick in. I asked around and got a list of jumpers to use to activate the Tandon which I will try. If I can get the AERCO to work with a Tandon then I will try to get the EPROM to enable me to use a double sided drive on the system. Just another project to work on.

I will have to write to several and report the costs of the ZX81, Tree Forth manual, the source code and the EPROM. Several seem to want it and if you are going to use the ZX81 to control something then that is the way to go since Forth is so fast.

The SNUG meeting was a lot less noisy (except for the swimming pool) than I had expected from what I witnessed at CATS. Progress is slow and partly the officials are waiting for sugestions for which way to go. A few tentative suggestions were made for what members could do to help out.

Telecommunications and mass storage got a lot of pros and cons and ideas were expressed. No universal fast standard for mass storage was found.

I was sad at how fast the motel staff tore down the tables and stuff and closed out the FEST. Several of us stayed over and left Monday morning which was a nice day with little wind and no rain.

I met several that I only knew as a voice and name and now they mean more to me. The best news from the FEST was that there was talk about having one next year. How about Chicago or back to Indianapolis again? At least it is being considered.

Frank Davis and his wife are going to pick up UPDATE. That is a relief since Bill was really sincere in quiting. He put in some good years getting it going and now it looks like it will continue. I guess it is the only none User's Group publication since Time Designs seems to have fadded away. At least I have not received a copy since the copy I picked up at the CATS CAPITAL FEST. I know that others have received copies but I guess I got left out. I guess I will have to try to get some one to copy what I missed. That has been accomplished since Frank Davis has supplied me a copy of the missing issue.

Frank and Carol Davis of UPDATE reported that they had received 23 new subscribers to the magazine and a lot of renewals including mine. I do wish them luck. If anyone has anything that is in the proper category get it to them for publication. I would like to see so many contributions that they would have a hard time deciding what to run. Frank said that a well written article on the ZX81 and disk drives would not be turned down.

Now that UPDATE is continuing I will have to get another notebook to put the upcoming issues in. I do think that the idea of having it already punched for a 3 ring binder is great. Actually the current binder is overloaded so I will get it going soon. Time for me to go through it again to see what else I can learn. I learn slowly and need to go back often.

I felt that the money that the FEST cost me was well invested. I went for the social life and I did find both hardware and software to bring home to my wife's displeasure. I now have to clean out my corner of the basement. Actually it is overdue and really needs to be done.

I had bought a QL power supply for a buck with the idea of using it for a ZX81 power supply but it wasn't working right. The top of the case was put on with four Philips head screws that were deeply set and I got three loose but the fourth just wouldn't turn and I think that the cross in the head of the screw was damaged before I started. I tried to drill it out but it was made of very hard steel. I finally got the case pried open enough to get a hacksaw blade in to cut the plastic and get the case separated. I tried to take a quick look but I will have to study to see which is supposed to be the 9 V. D. C. at 1.8 A, the other is supposed to be 15.6V and the voltages are about the same. The transformer has so many voltage taps it makes it hard to tell which is which, I will have to try to group the voltages and work from that.

I finished testing the 3 drives that could read a disk and they will FORMAT and SAVE the format program so they should be good in all aspects. And without a lot of unneccesary chatter like one I have does. The other two drives will FORMAT and SAVE and READ what was SAVEd but will not READ any other drives disk nor will their disk be READ by another drive. I believe that when I reset both speed and track 0 they

will work properly. I will have to go through the surplus drives I have, and pitch the ones that don't work. They are heavy and take up a lot of room.

C. L. Harlan; 3 Pine Circle; Macon, MO 63552 called again today with more information about his T/S 1000 system that he has for sale. No price quoted but he has quite a collection of magazines and newsletters to go with the system. He has the T/S 1000, T/S 2040 printer, Banana Gorilla printer with descenders ROM, Parallel printer interface, Memotext Graphics module, (I think also a Memotech RAM module) and possibly other stuff. Even if I wanted this system with my wife on the war path I do not even dare think about more stuff for a while till I get it to look like I have gotten rid of some stuff.

I did end up with a copy of the manual for the ZAD board that I got from ZEBRA last year. I figured it was an Analog digital board but I had not the POKEs to use it nor if it was for the T/S 1000 only. It is for the T/S 2068 also.

But no information surfaced on the ZEBRA ZX81 TALKER board. I did earlier get information on the T/S 2068 version. The other mystery board (VS101) could be an earlier version of a speech board. A day going through the old newsletters may provide more clues.

I picked up a pair of non-working T/S 1500s and one maybe just a bad keyboard ribbon that parted. If there was only a way to repair that flimsy keyboard ribbon cable. I hope that the one that doesn't work at all has a good ribbon cable and keyboard. I got them for spare parts. Also, make a good one to use with my EPROM programming since 16K is on board. I will have to find the information to get a monitor circuit on the T/S 1500 and get a good display.

On the way into Decatur, Ill I stopped at a used book place called the BOOK BARN and they had a section on computers and in that there were three books on the T/S but one was for children and the another I already had so I got a copy of "COMPUTER COMPANION FOR THE SINCLAIR/TIMEX COMPUTERS" by Robert P. Haviland published by TAB BOOKS ISBN 0-8306-1623-3 for $2.50. At first glance it seemed like a book to round out my knowledge but furthur study leaves me to wonder if it is really that great.

Then last Tuesday I was given a copy of "the Z-80 microcomputer handbook" by Willliam Barden, Jr. published by SAMS ISBN 0-672-21500-4. Copyright 1978 and third printing 1979 which means that the data on the later issue Z-80 chips is lacking. I will have to get data sheets on the Z-80A and Z-80B to get up to date. An IBM PC hobbyist that frequents the Collins Inventory Disposal Store gave it to me. Imagine! An IBMer helping out a T/Ser!

William Pedersen of WIDJUP fame could not attend the FEST since he is recuperating from a heart attack (stroke?) and is partially paralysed on one side. But his brother attended in his place. And his brother did not know computers at all. Bet he felt like he was in a lion's cage with all the questions and he could not answer any.

I will give the AERCO ZX81 controller a little work to see if I can get a Tandon drive to work. Only it has been more than a little work and still no progress. I tried different jumpers on the drive select socket to no avail. However, now I remember that the single drive case and power supply does possibly have a problem. For a reason that I do not understand, if the drive is plugged in with the three connector plug the ZX81 computer will not come up but if I use an adaptor that does not have the ground line then it will work. But the same computer with the ZX81 Larken disk controller in place will not work with the T/S 2040 printer plugged in. Which leads me to suspect that the power supply for some reason may be a culprit. I have eyeballed the power supply but I can see no reason why. But then my 1943 electronics education leaves

much to be desired.

More immediate, I did have a problem with the T/S 2068 and the Larken disk controller after the computer had been idle a couple of days. I had received the monthly specials from RMG on disk and I wanted to look at them. But all I could get was an error message and I tried another disk and it was the same. I powered down and pulled off the disk controller board, the disk controller to disk drive cable and replugged them in. And it worked. With all this humidity, from all the rains making almost twice the average for June, it could be corrosion on the connectors one place or another. I will have to try the next time that happens to unplug one at and time and check to see if it is working.

After my wife was home the 9th of May the package came from Sherman Lee of CA with the Suntronics keyboard with computer board inside, a spare complete T/S 1000, 64K Memotech rampack, ZX81 AERCO disk controller with operating system on disk and a double disk drive case and power supply with one single sided 40 track Siemens drive. Sherman had not been able to get the system to work but I finally got it to work and I believe that the problem was a sticky worm on the drive head. It seemed to be more reliable as I used it more. If I could get a Tandon drive to work I would put a pair of them in the cabinent and have the use of both drives for copying and such. For that I will have to get the other EPROM for the disk controller, even the single sided would be an improvement if I had two working. I have wrote to Richard Matejovic to see if I could get the program that Bill Bell wrote for him that improved the AERCO disk system. Richard is the one that had an article on reading MSDOS disks with a ZX81 AERCO disk controller in Computer Buyer's Guide to see if I could get a copy of the better AERCO operating system that Bill Bell wrote for Richard. Richard is using a paper punch to punch holes in the double sided disks to make flippies out of the floppies so he can use both sides on his single sided drives.

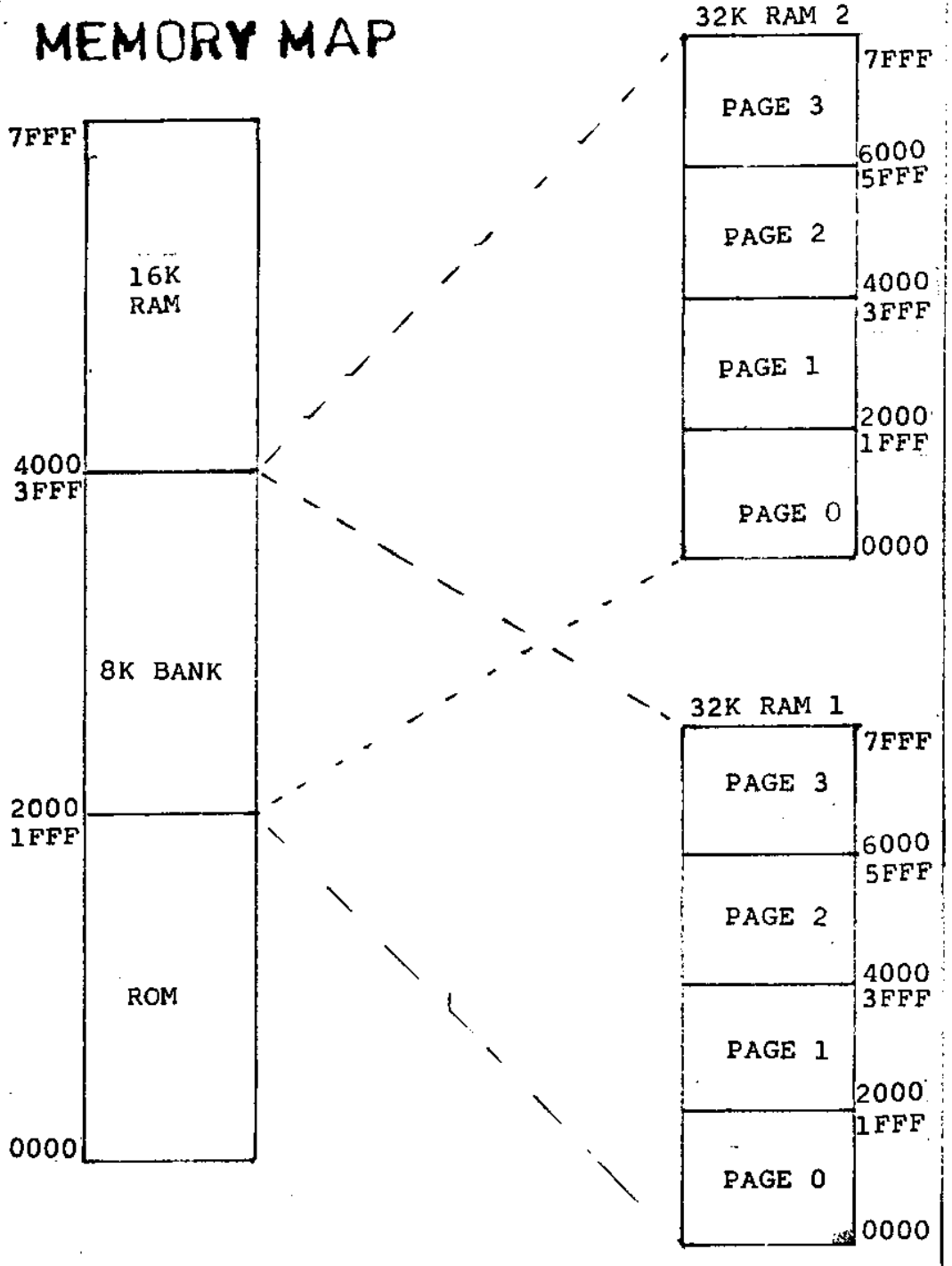
One of the things discussed at the SNUG discussion on Saturday night was a hard copy library. It was suggested that everyone volunteer to copy to an electronic medium one magazine or whatever so that it could be placed into the SNUG library. It has always been my contention that should be a large part of the SNUG operations. Also, it has been my contention that everyone should list their equipment with SNUG so that if any one needs help, advice or whatever to get it going or to get more software or suggestions to improve it is possible to find someone that is still using or had used that equipment.

In that vein I have some hardware boards that I got at the CATS FEST in 1989 that I have not found any documentation for. I was looking also for documentation for the ZAD board but I managed to get a manual for that at the SMUG FEST. I also got the software and manual for the T/S 2068 Zebra TALKER board. But I am still looking for the manual and software if needed for the ZX81 TALKER board and also the ZEBRA US101 board. I heard it might be an early model of a TALKER board. I would be willing to share what I have with anyone if they will pay copying and postage. I will also do the same for any manuals, etc. for what I don't have.

I would also like to find someone that is still using the ZX81 AERCO disk drive controller. Especially I would like to learn if Tandon TM 100-2A drives will work with the AERCO. The manual states that a Shugart compatible is used but what is a Shugart compatible? If a Tandon can be used what is the way to use it?

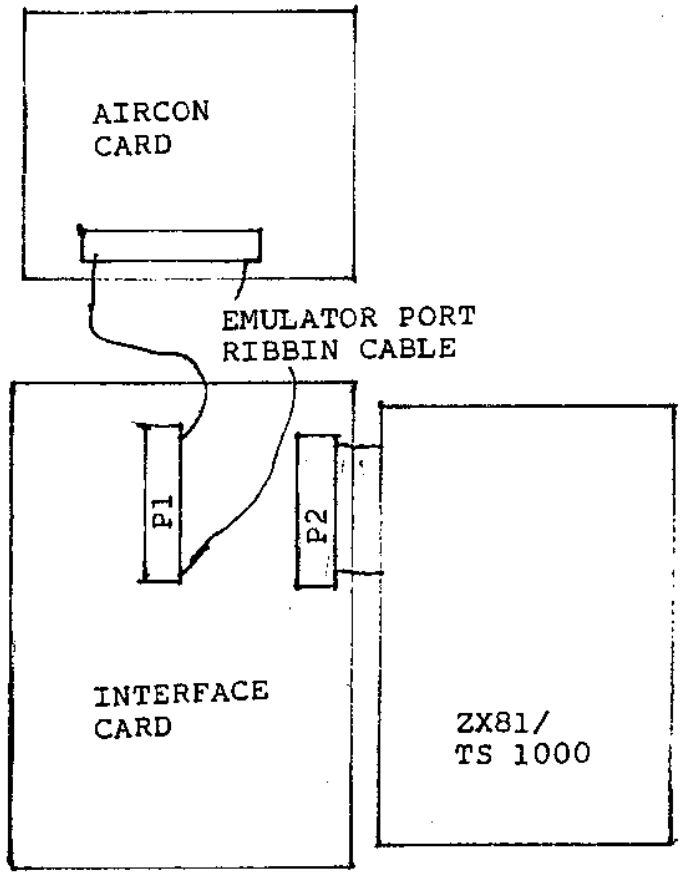
Note: All typos are free.

MEMORY MAP



MIKE LEDUC'S DEVELOPMENT SYSTEM. First part of many.

EMULATOR PORT ALLOWS ZX81 TO TAKE MASTERSHIP OF AIRCON PROCESSOR CARD BY DISABLING THE AIRCON Z80 AND CONTROLLING THE AIRCON I/O DEVICES THROUGH THE EMULATOR PORT.



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